

Remarks

Claims 1-3, 6-9, and 11-15 are pending.

Claims 1-3, 6-9, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurst Jr. (U.S. 6,038,000) in view Zhang et al. (U.S. 6,611,624).

Applicant respectfully traverse the rejections, however in an effort to advance prosecution of the pending claims Applicant amends independent claims 1 and 13 herein.

One of the advantageous features of the Applicants invention is the ability to transport an “already prepared” transport stream to a consumer’s set-top-box (STB) with little or no required processing at the tail-end of the transmission, i.e., no heavy processing by the STB. Many STBs in the consumer market today do not and cannot process parallel data streams to seamlessly switch between multiple streams sent by a content provider. According to independent claims 1 and 13, the methods and systems for preparing a plurality of data streams to allow seamless switching by a switching device are completed at the head-end of the transmission flow. That is, the signals are prepared, according to the claims, before they are broadcast to a consumer’s STB.

Specifically, claim 1 recites preparing said plurality of data streams by, among other steps, increasing a data rate of said multiplexed plurality of data streams from a first data rate to a second data rate at a time before an end point of each segment by changing the multiplexing for said plurality of streams to provide gaps in said plurality of data streams between said end points and said starting points wherein such changing of multiplexing does not affect the contents of said plurality of data streams, and wherein said plurality of data streams are processed at least in part on a serial basis.

Claim 1 is patentably distinct from Hurst and Zhang because neither reference discloses processing the data streams on a serial basis. In fact, Hurst and Zhang are premised on the

parallel reception of both streams by a receiver. Both teach systems which require receiving parallel transport streams to a receiver and processing and monitoring those streams at the receiver end of the transmission. See Figure 1 of Hurst (blocks 110, 120), Figure 7 of Zhang (blocks 702 708). Many STB devices in use today are not capable of such processing and monitoring because traditional STBs, even if configured as dual-tuners, are not capable of seamlessly switching data streams. Claim 1, on the other hand, prepares the data streams such that they can be processed serially by the receiver. Embodiments on the invention, incorporating the features of claim 1, allow simple STB receivers to receive a prepared transport signal and process the data streams serially, not in parallel. Applicant respectfully submits that claim 1 is patentable over Hurst and Zhang and is in condition for allowance. Further, claims 2-3, 6-9, and 11-12, by virtue of their dependency on claim 1, are also allowable.

Independent claim 13 includes a similar feature wherein the plurality of data streams is processed at least in part on a serial basis. For the reasons stated above, Applicant submits that claim 13 is patentable over Hurst and Zhang which both require processing and monitoring of parallel data streams at the receiver end of the transmission. Claim 13 features a plurality of data streams to be prepared at the head-end and serially processed to provide seamless switching between the data streams. Applicant respectfully submits that claim 13 is patentable over Hurst and Zhang and is in condition for allowance. Further, claims 14-15, by virtue of their dependency on claim 13, are also allowable.

CONCLUSION

For at least the reasons outlined above, Applicant submits that this application is in condition for allowance and requests favorable action in the form of a Notice of Allowance.

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If, in the Examiner's opinion, a telephonic interview would expedite the favorable prosecution of the present application, the undersigned attorney would welcome the opportunity to discuss any outstanding issues, and to work with the Examiner toward placing the application in condition for allowance.

Respectfully submitted,

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